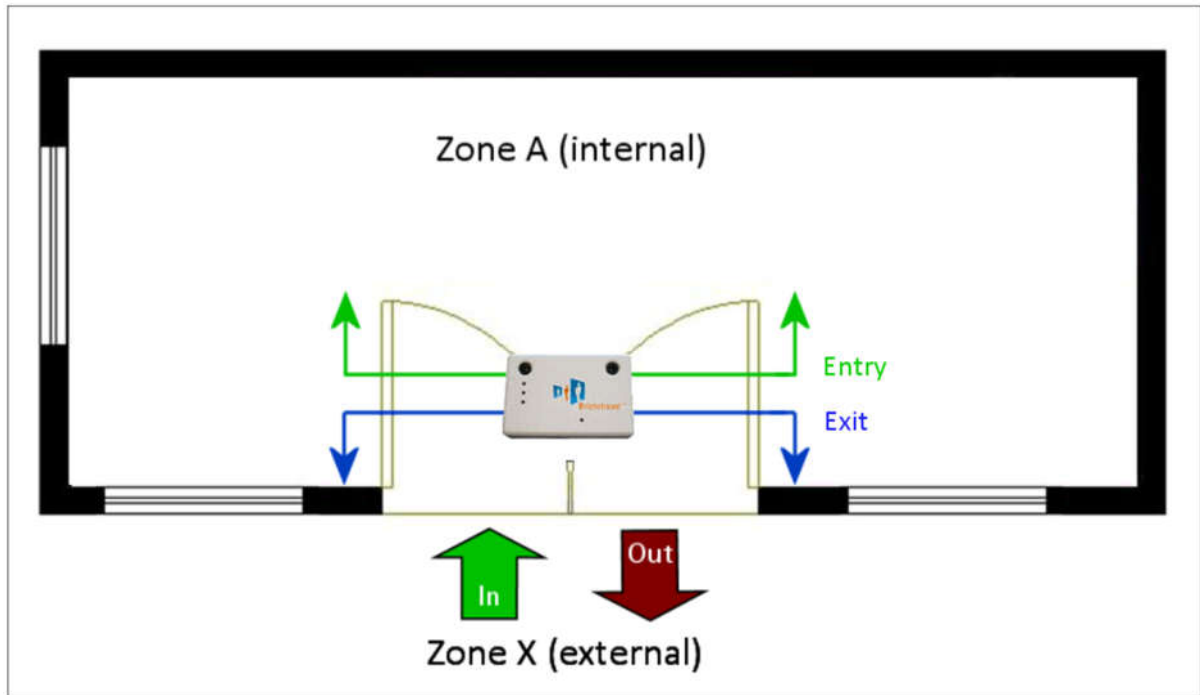


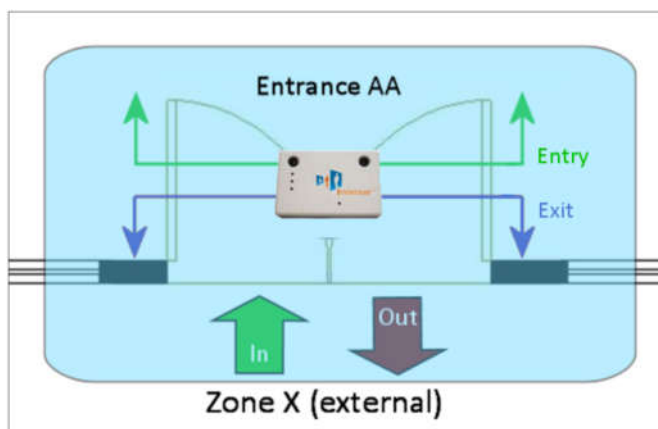
Configuring a Brickstream Counter for Delivery to Xenometric's Cloud

Simple 1 Brickstream Counter Per entrance¹

The example below shows a simple retail store with one Brickstream Counter. The counter has been configured with two lines (**Entry** and **Exit**). The pedestrians entering the store are recorded by the **Entry** line, whilst the pedestrians exiting the store are captured by the **Exit** line. Pedestrians outside the store are labelled as being in Zone X, whilst pedestrians inside the store are labelled as being in Zone A. In all systems Zone X represents the outside world.



In order to represent this scenario we will need to program the Brickstream counter with the correct IDs for each pair of lines. To do this we will allocate a 2-character ID to the entrance. Both lines belong to the same entrance, as one counts the *In* direction and the other the *Out* direction.



The entrance shown has an ID of AA.

The entrance forms a boundary between zones A and X. We can write this as a Zone ID of AX. The first letter of the Zone ID always relates to the destination of the Entry line. The second letter represents the destination of the Exit line.

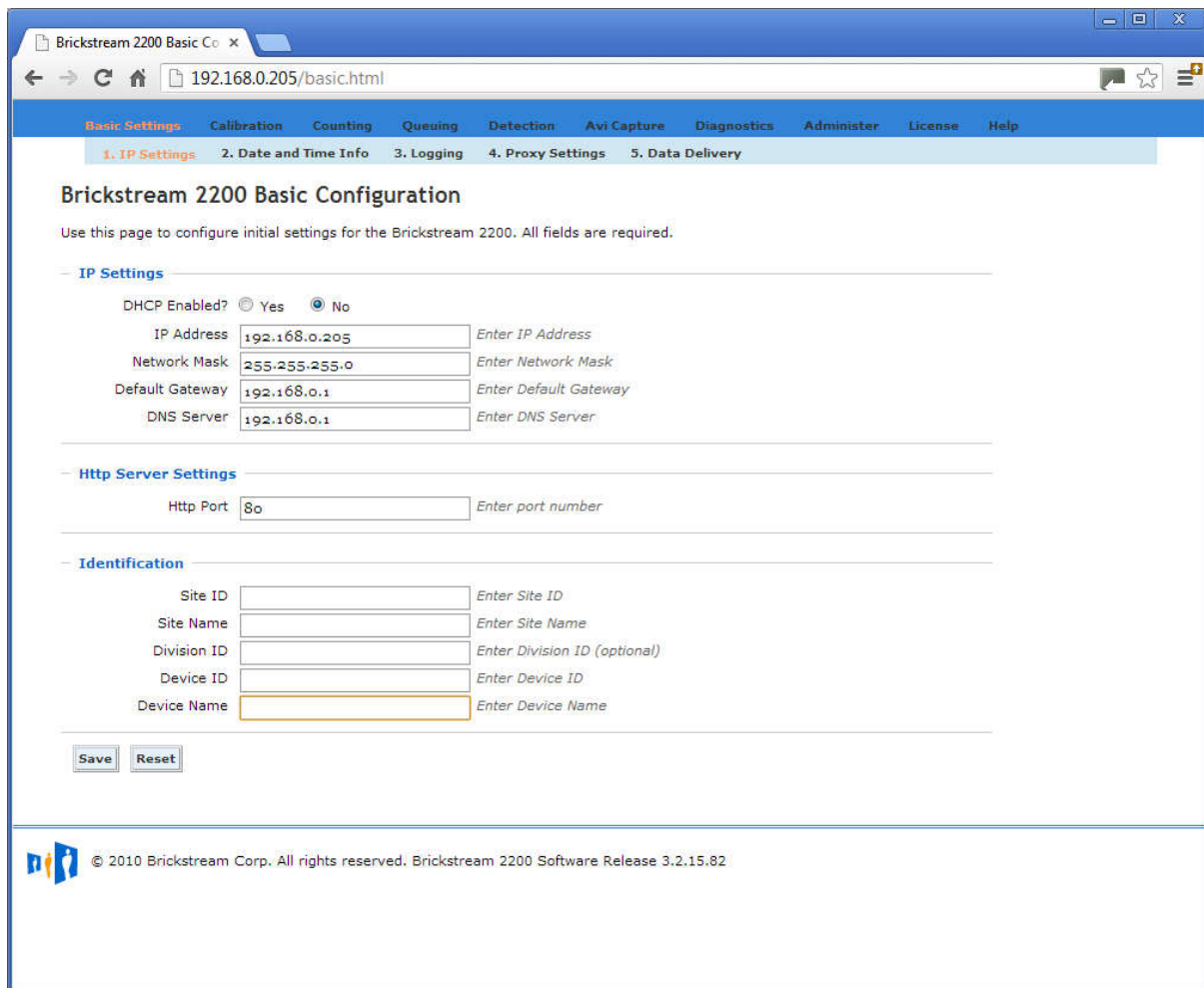
The complete Device ID for this pair of lines is AAAX. This is essentially the Entrance ID of AA and the Zone ID of AX.

1. For locations where more than one Brickstream counter is used to monitor a single entrance there is another ID scheme that can be used. This scheme is not described in this manual.

Configuring the Brickstream Counter

The following steps should be performed in order to configure a Brickstream counter to talk to Xenometric's server.

1. Use a web browser to connect to the Brickstream counter.



The screenshot shows a web browser window displaying the 'Brickstream 2200 Basic Configuration' page. The browser address bar shows '192.168.0.205/basic.html'. The page has a blue header with navigation tabs: 'Basic Settings', 'Calibration', 'Counting', 'Queuing', 'Detection', 'Avi Capture', 'Diagnostics', 'Administer', 'License', and 'Help'. Below the header, there are sub-tabs: '1. IP Settings', '2. Date and Time Info', '3. Logging', '4. Proxy Settings', and '5. Data Delivery'. The main content area is titled 'Brickstream 2200 Basic Configuration' and includes a note: 'Use this page to configure initial settings for the Brickstream 2200. All fields are required.' The 'IP Settings' section has a 'DHCP Enabled?' section with 'Yes' and 'No' radio buttons, where 'No' is selected. Below this are input fields for 'IP Address' (192.168.0.205), 'Network Mask' (255.255.255.0), 'Default Gateway' (192.168.0.1), and 'DNS Server' (192.168.0.1). The 'Http Server Settings' section has an 'Http Port' field set to 80. The 'Identification' section has input fields for 'Site ID', 'Site Name', 'Division ID', 'Device ID', and 'Device Name'. At the bottom of the form are 'Save' and 'Reset' buttons. The footer of the page contains the Brickstream logo and copyright information: '© 2010 Brickstream Corp. All rights reserved. Brickstream 2200 Software Release 3.2.15.82'.

I will assume that the IP settings are already configured, since you have managed to connect to the unit over http.

The Identification section is the important are of this page, as it allows us to configure the Xenometric IDs that will be used when the Brickstream counter talks to the X-Server.

The **Site ID** is an identifier that represents an entire building or system. The Site ID might represent a single store or a large shopping centre (mall). The important thing is to make sure that the Site ID is unique. All Brickstream counters in the building will share the same Site ID. Typically Site IDs have between 6 and 12 (max 20) characters. The characters can be numbers or letters of the Roman alphabet (A-Z, 0-9). It is best to keep all letters in upper case. A valid Site ID might be USA00001. This could represent the first site you installed in the USA. Any combination is letters and numbers is fine.

The **Site Name** is the name which will appear on reports for the building (store, shopping centre, casino etc.). This field can contain non-Roman characters (Unicode) up to a maximum of 50 characters. A mixture of upper and lower characters from any alphabet is fine.

The **Division ID** is not used by Xenometric.

The **Device ID** describes the entrance and zone boundary of the Brickstream counter. Page 1 of this document describes how to generate a valid Device ID. Device IDs are always comprised of Roman characters (A-Z, 0-9) and are typically written in upper case. The example on page 1 uses a Device ID of AAAX. More complex IDs are created for bigger systems with many entrances and multiple zones. Each Entrance must have a unique ID, e.g. AA, AB, AC etc. Each Zone must have a unique ID, e.g. A, B, C etc. The only exception is the special zone X, which represents the outside world. This zone is common to all counters that border the outside world.

The **Device Name** will become the Entrance Name in Xenometric reports. This field can contain non-Roman characters (Unicode) up to a maximum of 50 characters. A mixture of upper and lower characters from any alphabet is fine.

— **Identification** —

| | | |
|-------------|--------------------------------------------|-------------------------------------|
| Site ID | <input type="text" value="USA00001"/> | <i>Enter Site ID</i> |
| Site Name | <input type="text" value="Mega Mall"/> | <i>Enter Site Name</i> |
| Division ID | <input type="text"/> | <i>Enter Division ID (optional)</i> |
| Device ID | <input type="text" value="AAAX"/> | <i>Enter Device ID</i> |
| Device Name | <input type="text" value="Main Entrance"/> | <i>Enter Device Name</i> |

The example above represents a large shopping mall in the USA. The Site ID is unique for this mall. The Brickstream counter is located over the main entrance (ID = AA) and border the outside world (X) and the internal zone (A).

Save the settings once you have applied them.

2. Navigate to the Date and Time Info page

This page allows you to specify how the Brickstream counter corrects its internal clock.

The screenshot shows the 'Date and Time Info' section of the 'Brickstream 3D Basic Configuration' page. The page has a blue header with navigation tabs: Basic Settings, Calibration, Counting, Queuing, Detection, Avi Capture, Diagnostics, Administer, Privacy, License, and Help. Below the header is a sub-header with numbered steps: 1. IP Settings, 2. Date and Time Info (highlighted), 3. Logging, 4. Device Manager Settings, and 5. Data Delivery. The main title is 'Brickstream 3D Basic Configuration' with a subtitle: 'Use this page to configure initial settings for the Brickstream 3D. All fields are required.' The 'Date and Time Info' section contains the following fields: Date (02/11/2016), Time (10:28:15), Time Zone ((GMT) Greenwich Mean Time : Dublin, Edinburgh), Time Server Protocol (Brickstream 3D), Time Server (www.xenometric.com), and Port (2000). There are buttons for Refresh, Sync Now, and Set Time. At the bottom of the section are Save and Reset buttons.

Select the correct time zone for the location of the counter and then select 'Brickstream 2200' as the Time Server Protocol. The Time Server field should contain the IP address of the X-Server. The Port should contain a port number that the X-Server is listening on.

3. Navigate to the Data Delivery page

We need to enable Batch Data Streaming. These settings instruct the counter to deliver data to the X-Server.

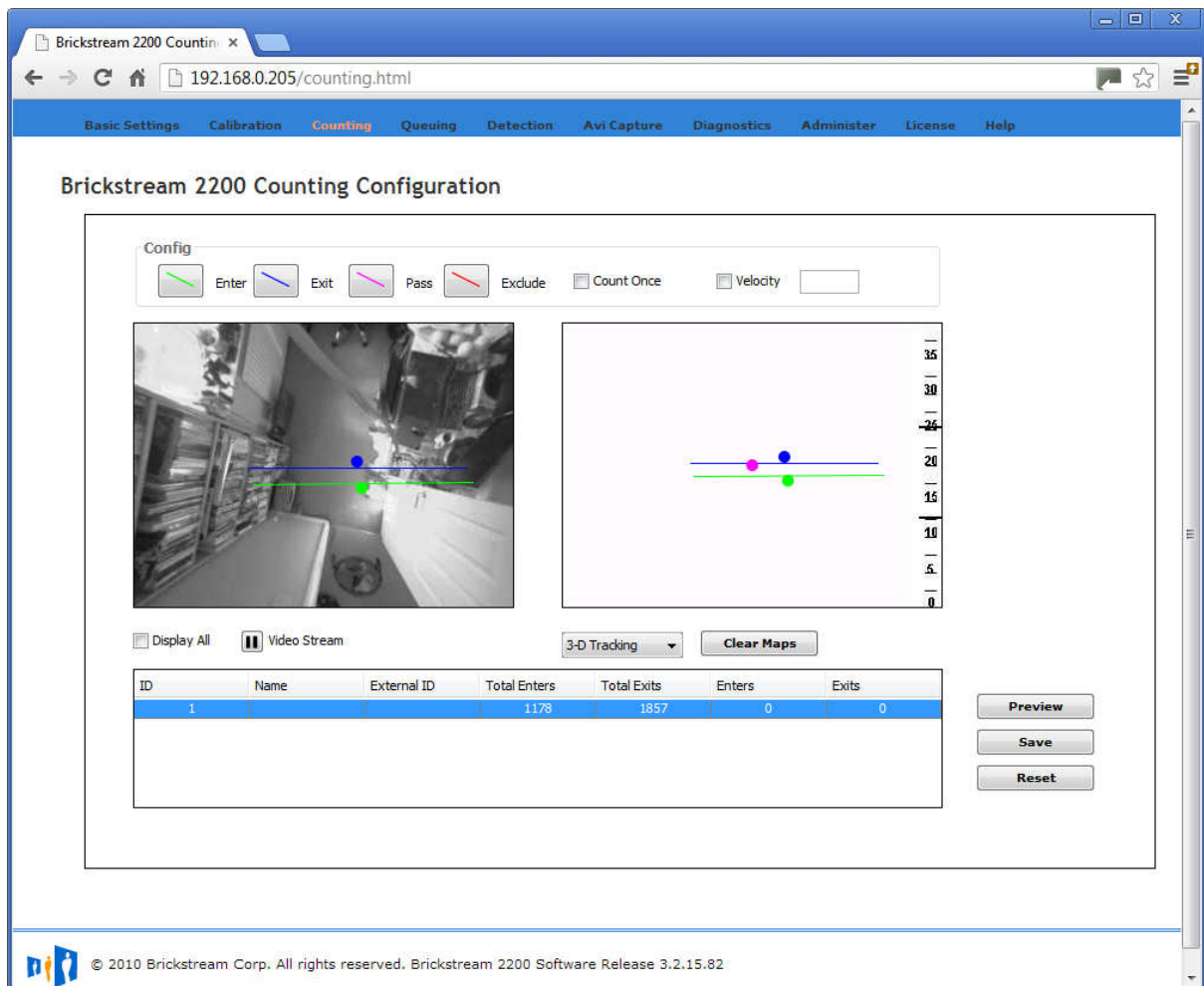
The screenshot shows the 'Batch Data Streaming' section of the 'Brickstream 3D Basic Configuration' page. The page has a blue header with navigation tabs: Basic Settings, Calibration, Counting, Queuing, Detection, Avi Capture, Diagnostics, Administer, Privacy, License, and Help. Below the header is a sub-header with numbered steps: 1. IP Settings, 2. Date and Time Info, 3. Logging, 4. Device Manager Settings, and 5. Data Delivery (highlighted). The main title is 'Brickstream 3D Basic Configuration' with a subtitle: 'Use this page to configure initial settings for the Brickstream 3D. All fields are required.' The 'Batch Data Streaming' section contains the following fields: Enable Batch Data Streaming (checked), IP Address (www.xenometric.com), Port (2000), Enter URL (/), Aggregation Level (15 mins), Delivery Schedule (Immediate), Encrypt data (No), and SNI Host Name (192.168.1.254). Each field has a placeholder text indicating the expected input.

The example above assumes that the X-Server is installed on a server with IP address www.xenometric.com and is listening on port 2000. Every 15 minutes the Brickstream counter will connect to the X-Server and delivery counts for the previous 15 minute period. This interval can be reduced or increased to suite the level of detail required. Click on Save to store any changes.

4. Configuring the Counting page

The counting page will contain a single count zone (for this example), which contains an entry and an exit line. This manual does not discuss how to configure the count zone and lines.

The count zone has two fields that can be edited; the Name and External ID. Both of these fields should be kept blank. If they are used they override the Device Name and Device ID specified on the Basic Settings page.



Troubleshooting

- Ensure that there is an Internet connection. Can you ping the counter from the X-Server machine?
- Make sure that there is not a firewall set to block outbound communication from the counter to the X-Server.
- Make sure that the configuration in the counter is correct. The Site ID and Device ID strings must match one of Xenometric's formats.